

**Title: IMPROVED SEAL FOR A SHAFT**

**ABSTRACT**

Unitary radial lip seals are useful to provide permanent lubrication to rotary shaft and bearing assemblies. In addition, these seals also function as excluder seals to keep dirt, chemicals, and other contaminants from contacting the lubricated surfaces. However, previous radial lip seals have a tendency to wear or cut a groove into the associated rotary shaft, as the shaft is rotated during normal operation of the machine. The present disclosure describes a radial lip seal having a sleeve, a seal case, a faceplate and flexible member. This improved seal also has a second sleeve operably positioned between the shaft and the faceplate wiper ring that alleviates the tendency of the wiper ring to cut a groove into the shaft during normal operation of the machine.